

**Notice of Allowability**

Application No.

10/712,203

Examiner

Derek L. Dupuis

Applicant(s)

KUBBY ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed 5/13/2005.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 12 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 8/27/04 & 2/26/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statements (IDS) submitted on 8/27/2004 and 11/12/2003 have been considered by the examiner.

### ***Drawings***

2. The drawings were received on 11/12/2003. These drawings are accepted by the examiner.

### ***Allowable Subject Matter***

3. Claims 1-17 are allowed.
4. The following is an examiner's statement of reasons for allowance:
5. Claims 1-17 are allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious a multi-state optical latching switch comprising a drive actuator connected by a tether or hitch to a flexible cantilever beam platform wherein the flexible cantilever beam platform defines a plurality of optical waveguides and wherein the switch includes a latch actuator with latching teeth that connect with linkage teeth of a linkage attached to the drive actuator in combination with the rest of the claimed limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. ***Kubby (US 2004/0184720 A1)*** teaches the entire claimed structure of claims 1-17. However, this reference was filed after the priority date of the application and is commonly owned. Therefore, it is not usable as prior art in a rejection under 35 U.S.C. 102 or 103. The claims of the reference do not conflict with the claims of the application therefore a double patenting issue does not exist. ***Koh et al (US 2003/0113067 A1)*** teach a cantilever beam with a plurality of optical waveguides. However, Koh et al does not disclose nor render obvious that the beam is attached to a drive actuator by a tether. ***Bakke et al (NPL)*** teach a flexible cantilever with only one optical waveguide formed thereon. It is not disclosed nor rendered obvious by Bakke that a plurality of waveguides can be formed on the cantilever structure. ***Lim et al (US 2002/0118084 A1)*** teach a latching actuator with latch teeth for an optical switch. However, Lim et al does not disclose nor render obvious a tether attached to a cantilever beam having optical waveguides for switching. ***Agrawal et al (US 2002/0011758 A1)*** teaches a switch with a drive actuator attached to a tether and linkage having linkage teeth. Agrawal et al also teach latching actuators with latching teeth that connect with the linkage teeth. Agrawal et al does not disclose nor render obvious that the tether can be attached to a flexible cantilever beam having waveguides formed thereon for optical switching. ***Labeye et al (US 5,612,815)*** teach an optical switch comprising a waveguide shuttle platform suspended by the arms of a drive actuator. Labeye et al teach that the waveguide shuttle comprises multiple waveguides, however, Labeye et al neither discloses nor renders obvious that the waveguides could be formed on a flexible cantilever beam. ***Kubby et al (US Patent Application 10/712,200)*** teaches an optical switch with

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the latch actuator, drive actuator, tether, and linkage as claimed by applicant. However, Kubby et al does not disclose nor render obvious that the tether can be connected to a flexible cantilever beam platform that comprises a plurality of optical waveguides.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derek L. Dupuis whose telephone number is (571) 272-3101. The examiner can normally be reached on Monday - Friday 8:30am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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